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PRODUCTION CURRENT SERVAL RECORDS

NATIONAL TICK SURVEILLANCE PROGRAM

Calendar Year 1971

Animal and Plant Health Inspection Service
U.S. DEPARTMENT OF AGRICULTURE

Prepared by
Veterinary Services
Animal and Plant Health Inspection Service
UNITED STATES DEPARTMENT OF AGRICULTURE
Hyattsville, Md. 20782

NATIONAL TICK SURVEILLANCE PROGRAM CALENDAR YEAR 1971

During calendar year 1971 the collection and submission of ticks from native and imported animals were 40 percent greater than for 1970. There were 4,247 species collections in 1971, compared with 3,025 in 1970.

TROPICAL BONT TICK SITUATION ON ST. CROIX

An active campaign was waged against A. variegatum after it was initially detected on St. Croix in August 1967. The treatment phase of the tropical bont tick program was terminated in May 1970 after only one infestation of A. variegatum (a single male) was collected on St. Croix in 1969. No infestations were detected in 1970. However, in March 1971 another collection, consisting of a single male specimen, was found on a sheep at the abattoir. Inspection of all livestock on the farm of origin resulted in

the detection of two more male ticks, one on a cow and one on a sheep. In January 1972 infestations were found on sheep and goats on two additional farms which adjoined each other and were located within a short distance of the first farm.

It is still not known whether these infestations of *A. variegatum* constitute a reintroduction of the tick from adjacent infested islands or whether they are a continuation of the original infestation.

BOOPHILUS OUTBREAK IN CAMERON COUNTY, TEXAS

In 1971 a serious outbreak of cattle fever ticks occurred in Cameron County, the most southerly county in Texas, which lies adjacent to the Mexican border. Part of Cameron County is included in the quarantine zone or systematic area which serves as a barrier to prevent the introduction of *Boophilus* ticks from the infested area of Mexico. The quarantine zone is a narrow strip which lies along the Rio Grande River and stretches from the mouth of the Devil's River (Amistad Dam), just north of Del Rio, to the entrance of the Rio Grande into the Gulf of Mexico, a distance of approximately 450 miles.

The winding course of the Rio Grande causes this area to contain 1400 miles of river frontage. This area must be systematically patrolled on horseback or by motor vehicle to detect and prevent the entry of stray livestock or illegal movements from cattle fever-tick

infested areas of Mexico. A force of approximately 60 inspectors is assigned to the quarantine zone. Each inspector is responsible for a strip of river frontage 20 to 25 miles in length.

In the 1971 Cameron County outbreak, cattle fever ticks were found on 31 premises and an additional 22 premises were exposed. Early in the outbreak, the eastern half of Cameron County was placed under a blanket quarantine by a proclamation from the Governor of Texas. Animals on the infested and exposed premises were dipped according to the regulations of the Texas Animal Health Commission.

Since the initial infestation was detected on cattle as the result of an inspection at an auction market, all cattle in markets in the general area were chute-inspected for several months. No additional cattle fever ticks were found at livestock markets. As a result of the Cameron County outbreak, a total of 88 premises in 11 counties in Texas were infested or exposed. Fortunately, only one premises outside of Cameron County was found to be tick-infested. This premises was in Hidalgo County which adjoins Cameron County. All evidence indicates that the Cameron County outbreak has been contained.

In the remainder of the quarantine zone, exclusive of the area of the Cameron County outbreak, 29 native herds were found infested with fever ticks. This number of herds is considerably higher than is normally

encountered. In all cases the required tick eradication procedures were carried out and there was no indication of spread of cattle fever ticks to areas outside the quarantine zone.

The effectiveness of the quarantine zone in preventing the reintroduction of cattle fever ticks into Texas and the Southeastern United States is readily measured by the fact that, except for small isolated outbreaks which were rapidly detected and eradicated, cattle fever ticks have not been successful in reestablishing themselves in the United States since the quarantine zone was established along the Rio Grande in 1938.

ARGAS PERSICUS FOUND IN MARYLAND AND PENNSYLVANIA

Two premises were found infested with Argas persicus, the fowl tick, in 1971. One collection was from Shippensburg, Pa., and the other was from Calvert County, Md. Rarely has this species been collected by animal health personnel in the past 11 years. One wonders if the decreased use, in recent years, of persistent pesticides such as lindane and DDT has resulted in an increased incidence of this parasite. Prior to the introduction of these pesticides, the fowl tick

was a common and serious parasite in some areas of the Southern and Southwestern United States.

The Maryland infestation is especially interesting because of the unusually high death losses in the small farm flock. The owner reported that he lost 85 percent of 100 young pullets within one month after they were placed in the very heavily infested poultry house. All clinical signs indicate that the birds died of tick paralysis.

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Alaska	3			1	1	1	
Arizana	16	7			1	1	7
Arkansas	209	153	30	3	12	11	
Colifornia	10	3			2		5
Colorada	140	22	86	8	18	6	
Connecticut				,			
Delaware							
Florida	604	57	14	461	6	62	4
Georgia	31	12	3		3	12	1
Hawaii							
Idaha	1		1				
Illinais	7	2			4		1
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lawa	1	1					
Konsos	5	1			4		
Kentucky	7		4		3		
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Moryland	225	5	183		33	2	2
Massachusetts	10		7		1		2
Michigan							
Minnesota	3		3				
Mississippi	41	23	4		4	10	
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Montana	18	3	1	13	1		
Nebraska	29	13	15		1		
Nevado	1	1					
New Hompshire			i				
New Jersey							
New Mexico	7	9	1			1	
New Yark	7						7
North Carolino	5		2			3	
Narth Dokoto	3		2		1		
Ohio	6		2		3	1	
Oklahoma	125	99	5	5	11	5	
Oregon	31	6	9	3	13		
Pennsylvanio	8		6		2		
Rhode Island							
South Coralina	21	1		3	1	16	
South Dokoto	6	5				1	
Tennessee	13	10	1	1		1	
Texas	2,292	1,736		262	62	19	146
Utah	2		1			1	
Vermont							
Virginia	6	2	1	1		2	
Woshington	16	1		3	2	1	
West Virginio	1	1	1				
Wiscansin	4		1		1	2	
Wyoming	1						
Puerto Rica	165	102	8	52	3		
Virgin Islands	81	18		8	8	45	
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TICK COLLECTIONS FROM ALL HOSTS



DEPARTMENT OF AGRICULTURE VETERINARY SERVICES ANIMAL AND PLANT HEALTH INSPECT ON SERVICE

TICKS COLLECTED FROM NATIVE WILDLIFE CALENDAR YEAR 1971 ī 1 1 PUERTO RICO VIRGIR ISLANDS ST THOMAS ST JOHN EMPLE ST CADIA

PARTMENT / F. TE CHIRE

TOTAL: 227

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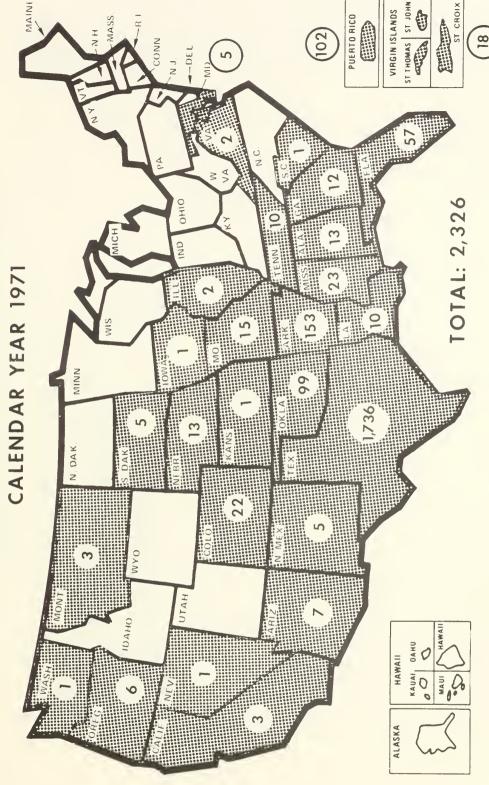
Key to Host

- BC Bobcat
 BI Bird
 BL Buffalo (Bison)
 BV Beaver
 D Deer
 EK Elk
 F Feral Swine
 J Javalina

- M Mongoose
 PO Opossum
 R Rabbit
 RC Raccoon
 SK Skunk
 S Squirrel
 WT Wild Turkey

Key to Species

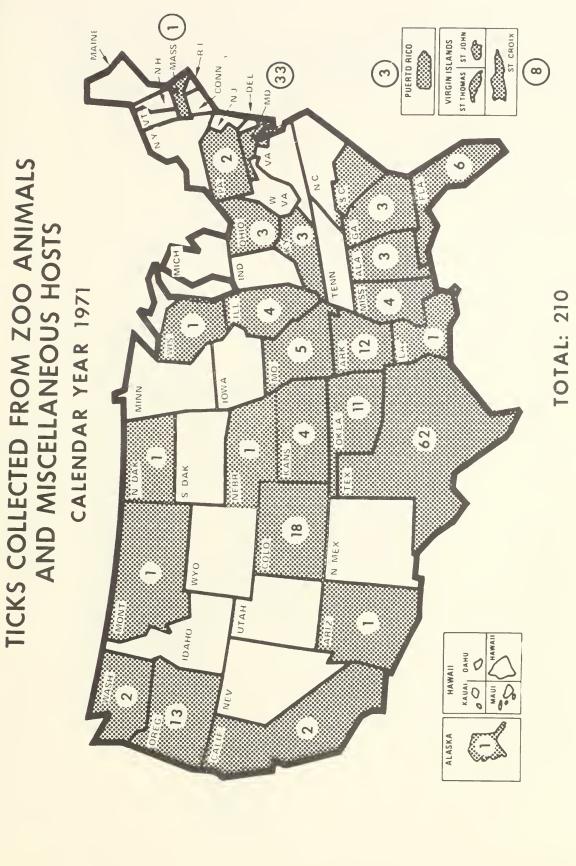
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Key to Species

n Amblyomma inornatum



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Key to Host

- BA Bos Constrictor
 BH Bighorn Sheep
 C Cat
 Ch Chicken
 H Human
 IG Iguena
 P Pangolin
 Q Host Not Given

- RT Rat (Mouse)
 SH Sheep
 ST Sooty Tern
 T Tortolse
 TT Two Toed Sloth
 X Inanimate Object
 Y Swine

Key to Species

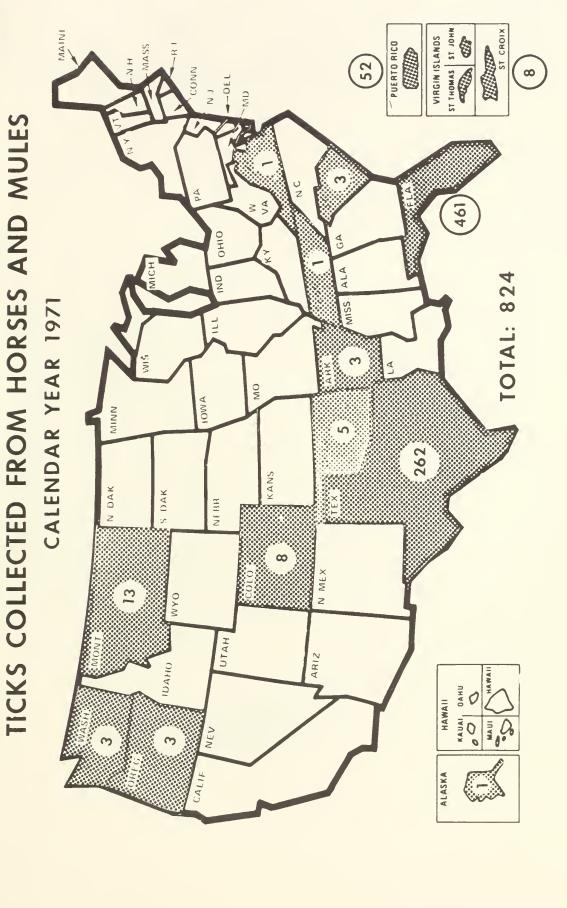
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 o Ambiyomna variegatum

TICKS COLLECTED FROM DOGS

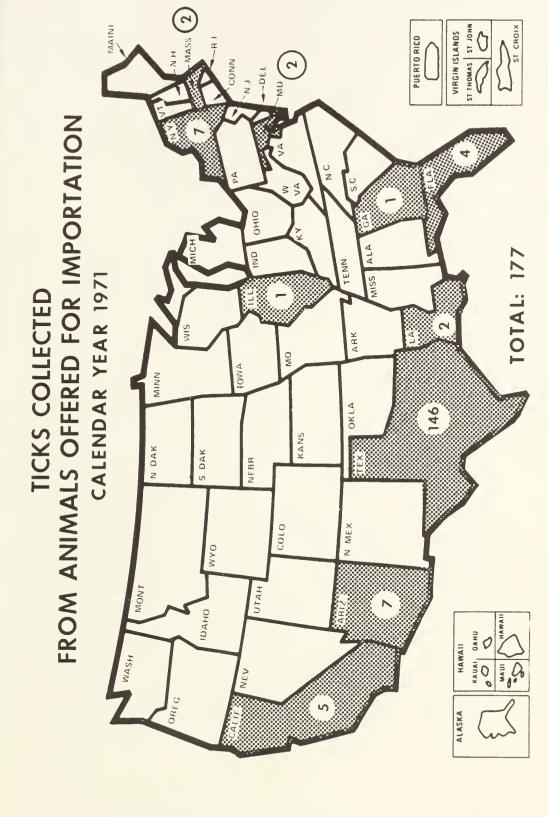
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Key to Species

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Key to Host

BU Cape Buffalo Skins
BO Bovine RU Misc. Zoo Ruminants
E Equine SS Sheep Skins
BN Bighorn Sheep TP Tapir
L Lizard
F Pangolin X Inanimate Object

Ney to Species

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***Include quarentine station in Clifton, N. J.